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EUROCAP PROGRAM-EBRE STATION

3rd Interim Report

(March 1994 - August 1994)

by

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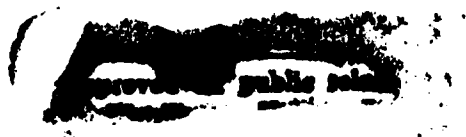
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SOUNDING ACTIVITY

Accession For	
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Unannounced	
Justification	
By	
Distribution /	
Availability Codes	
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A-1	

Hourly vertical incidence ionograms have been obtained regularly with the digisonde. The ARTIST output of the hourly ionograms have been sent to Fort Monmoth in floppy 5 1/4" HD diskettes as usual. The digisonde has been working without failures, so that only a small number of ionograms are lacking, due to power failures and other external causes.

The cause of the low efficiency of the receiving antennas has been found. The antenna preamplifiers are of an old type and the components seems to be aged. Unfortunately there are not replacements for all the components of this old type. I have been advised not to replace the preamplifiers at this moment and wait a new model that is being developed by Lowell University. In the mean time we will try and improve the performance of the actual preamplifiers modifying some of their internal voltages.

The ionospheric oblique sounding with Dourbes did not succeed because of

synchronization problems. No other campaign is planned at present, although some other will be done in future.

Total electron content data have been derived from the GPS receiver installed in the Observatory. The data have been compared with those obtained from the IRI and De Giovanni-Radicella models using the vertical incidence ionograms of the same Observatory. The results will be presented in the 11th International Beacon Satellite Symposium of Aberystwyth, Wales (11-15 July 1994).

PRIME PROGRESS

PRIME project will finish next March 1995. Most of the project work packages have already finished or have to be abandoned to concentrate in the final aim of the program.

In the Eindhoven meeting the proposal for a new project related to present PRIME was agreed. The new project will include an extension of the PRIME results to the whole Europe. After the project is approved by COST, 5 nations have to sign the Memorandum of Understanding (MOU) to become a COST project.

The two next meetings will be held at El Arenosillo (Spain) in September, and Rome, probably January next year. In El Arenosillo meeting the different mapping programs developed in PRIME will be tested.

A 15 minutes vertical incidence sounding campaign has been planned for a week on June. It has been requested by the instantaneous mapping working group.

Interesting results have been obtained in the study on quasi-two-days oscillations done in collaboration with the Bulgarian colleagues. They were presented in the Eindhoven meeting of PRIME.